

# **Scientific English**

**Teaching language :** English

Volume in hours : 26 hours of lessons + 60 hours of personal work.

**Target audience:** 3d year students of License in Immunology.

**Aim :**

At the end of the module, in relation to the subjects covered, the student must be able to:

- Apply strategies for taking courses and presentations in the field of Biological sciences, Immunology)of biology and take notes.
- In discussion, exchange relatively simple and complex information, discuss, express and support their opinions.
- Give a short oral presentation, ask and answer questions.
- Read, understand, translate and summarize a text in his academic field.
- Use autonomous working techniques.

**Prerequisites**

Students should have already followed English course during secondary school, and have basic understanding to Biological sciences and Immunology

Course 1 :

## Definitions and Immunology presentation

Read the following definitions :

### Definitions

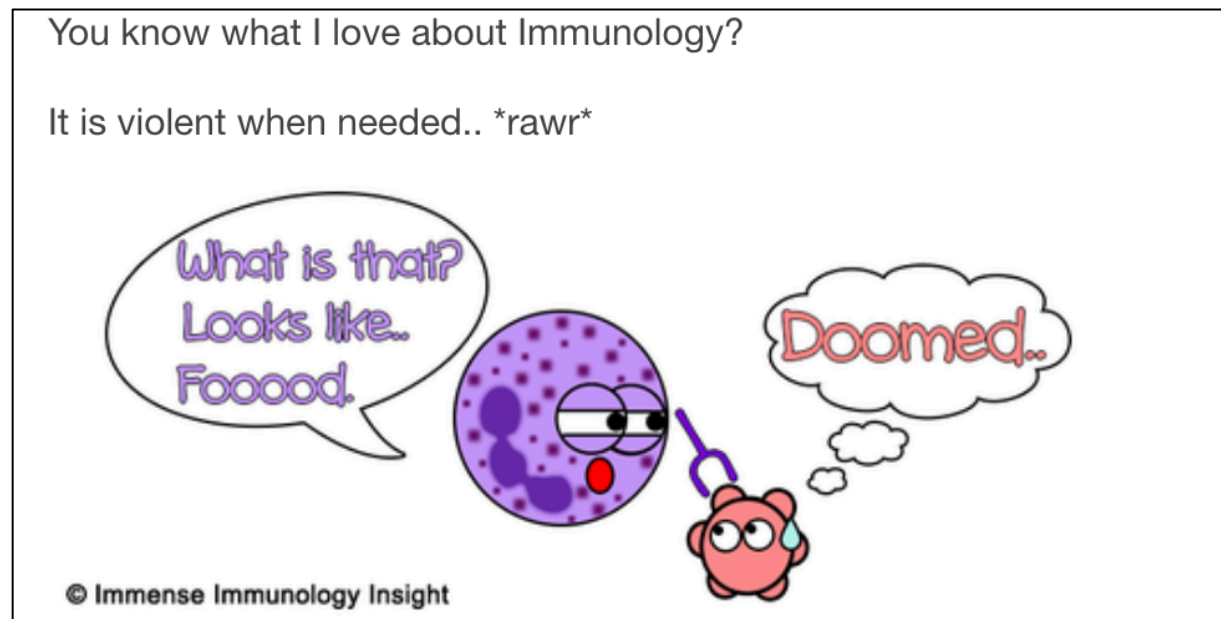
#### Natural sciences

Natural science includes physics, chemistry, **biology** and other cross-disciplines. Mathematics, statistics, and computer science may not be regarded as natural sciences but they are essential tools and framework in natural sciences. *Word origin:* Middle English, from Old French, from Latin *nātūrālis*, from *nātūra*, nature; **science**.

#### Biological sciences

Any of the branches of **natural science** dealing with living things, such as their **structure, behavior, organization**, life processes, as well as their **interactions** with each other and with the **natural environment**.

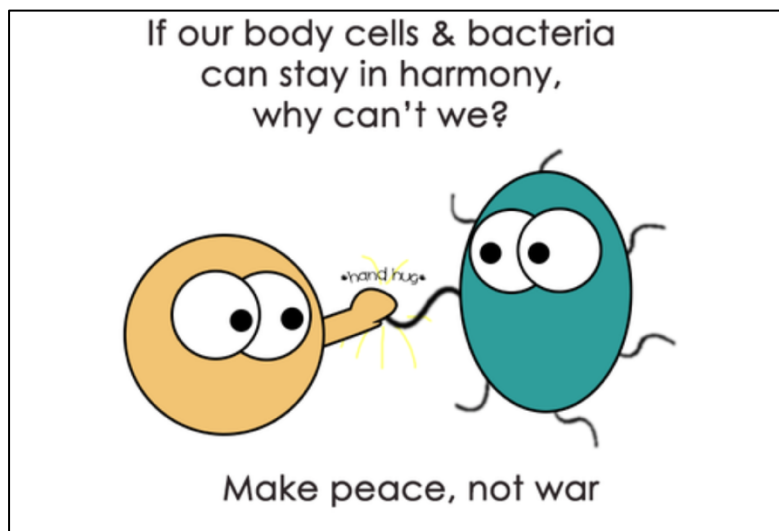
### What is immunology?



Immunology is the study of the immune system and is a very important branch of the medical and biological sciences. The immune system protects us from infection through various lines of defense. If the immune system is not functioning as it should, it can result in disease, such as autoimmunity, allergy and cancer. It is also now becoming clear that immune responses contribute to the development of many common disorders not traditionally viewed as

immunologic, including metabolic, cardiovascular, and neurodegenerative conditions such as Alzheimer's.

## Why is immunology important?



From Edward Jenner's pioneering work in the 18<sup>th</sup> Century that would ultimately lead to vaccination in its modern form (an innovation that has likely saved more lives than any other medical advance), to the many scientific breakthroughs in the 19<sup>th</sup> and 20<sup>th</sup> centuries that would lead to, amongst other things, safe organ transplantation, the identification of blood groups, and the now ubiquitous use of monoclonal antibodies throughout science and healthcare, immunology has changed the face of modern medicine. Immunological research continues to extend horizons in our understanding of how to treat significant health issues, with ongoing research efforts in immunotherapy, autoimmune diseases, and vaccines for emerging pathogens, such as Ebola. Advancing our understanding of basic immunology is essential for clinical and commercial application and has facilitated the discovery of new diagnostics and treatments to manage a wide array of diseases. In addition to the above, coupled with advancing technology, immunological research has provided critically important research techniques and tools, such as flow cytometry and antibody technology.

**Exercise**

At the highlight of the previous, write a small paragraph summarizing the importance of Immunology

**Paragraph :**

.....  
.....  
.....  
.....